

BULLDOZERS

A. Original Equipment Manufacturers (OEM)

The following offer full cabs on their new bulldozers. Local dealers should be contacted for availability and cost.

Manufacturer	Fully-Treated Cab	Muffler	Air-Conditioning
Caterpillar	X	X	X
Fiat-Allis	X	X	X
International	X	X	X
J. I. Case	X	X	X
John Deere	X	X	X
Komatsu	X	X	X
VME (Michigan)	X	X	X

"X" indicates product availability.

The manufacturer of new equipment should be consulted for details regarding noise levels inside the cab. If new equipment is purchased with a bare cab, or for older equipment without noise controls, additional retrofit controls may be needed.

B. Retrofit Noise Controls for Dozers

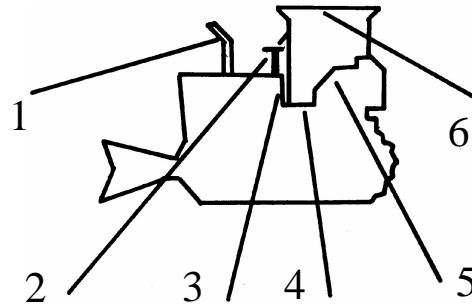
Dozers without cabs or with untreated cabs, can be equipped with an aftermarket operator cab. ([See Appendix C](#))

The effectiveness of noise controls on retrofit cabs depend on the quality of materials and installation. If a pre-cut acoustical material kit is not available, the materials may be purchased in bulk. ([See Appendix B.](#))

If air-conditioning is needed, the companies below provide this service:

Eagle Eng'g. & Mfg., Inc.	Welcome, Minnesota	(800) 533-0528 in MN (800) 722-0557
Red-Dot Corporation	Seattle, Washington	(206) 575-3840

The following are the major areas where noise controls should be applied on a dozer with a retrofit cab:



- Install an Exhaust Muffler (1) and extend the stack above the top of the cab.
- Put rubber “boots” around the base of the Control Levers (2) to prevent engine noise from entering operator area.
- Install composite material on the Firewall (3) to prevent engine noise from entering the cab.
- Tighten down any loose floor plates. Cover Floor (4) with an acoustical floormat material to prevent transmission noise from entering the cab. Minimize openings for floor pedals, yet allow full movement of the pedals.
- Install barrier or composite material on the base of the Seat (5) to prevent noise from traveling from the transmission access area into the cab.
- Cover reflective surfaces around the operator with a sound absorbing material(6).

If a full cab is not available, install a front shield. (Note: The level of noise reduction provided by a front shield will typically be less than that for a full cab.) The following are the major areas where noise controls should be applied on a dozer without a cab:

- | | |
|-------------------|-----------------|
| 1. Engine Exhaust | 4. Floor |
| 2. Control Levers | 5. Seat |
| 3. Firewall | 6. Front Shield |

Noise controls for these areas have already been described above.

The following are noise controls to consider for a front shield.

- Install a Front Barrier to isolate the operator from the engine and the exhaust

noise.

- Attach the front barrier to the bulldozer by installing "U"-bolts, straps, etc. or welding. If welding is done, it must be by a certified welder, according to manufacturer's directions, so as to not violate the certification.

- Seal the gap at the top and base of the barrier, and around the cowl. Use close-cell material, such as rubber, to prevent noise from leaking around barrier.

C. Alternative Technology

Radio remote control systems are now becoming available for a wide range of equipment. The use of radio remote controls, in conjunction with an appropriate exhaust muffler, can offer substantial noise reductions. A partial listing of manufacturers of radio remote control systems are as follows:

Black Box, Incorporate

586 Main Street
Glen Williams, Ontario L7G 3T6
Canada
(905) 873-0141
(905) 877-1809 (fax)

Moog Incorporated—Industrial Division

Electrohydraulic Servocontrols
Department T
East Aurora, New York 14052
(716) 652-2000

Catron, Incorporated

58 West Shenago Street
Sharpsville, Pennsylvania 16150-1198
(412) 962-3571
(412) 962-4310 (fax)

Tunnel Radio of America

33868 Southeast Eastgate Circle
Corvallis, Oregon 97333-2248
(541) 758-5637
(541) 758-1417 (fax)

Futaba Corporation of America

4 Studebaker
Irvine, California 92618
(714) 455-9888

Vectran Corporation

2170 William Pitt Way
Oakmont, Pennsylvania 15139
(412) 826-3100

Joy Mining Machinery

177 Thorn Hill Road
Warrendale, Pennsylvania 15086
(724) 779-4500